

Valuation of Top Three FMCG Companies in India

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Abstract

Valuation is a quantitative method of determining the fair value of an asset or a company. Discounted cash flow is a valuation technique used to estimate the value of a company based on its future cash flows. The comparable company valuation method is used to evaluate the value of a company using the metrics of other comparable companies of similar size from the same industry. This study employed these two valuation techniques to determine the intrinsic value of the top three fast-moving consumer goods – personal care segment companies, namely Hindustan Unilever Limited, Dabur India Limited, and Godrej Consumer Products Limited. The financial metrics were extracted from the selected companies' annual reports for 5 years from 2015–2019, and the stock price data were gathered from the National Stock Exchange. The explicit forecast was done for 5 years, from 2020–2024. This study concluded that these value-creating stocks would undoubtedly be wealth-creating stocks for investors.

Keywords : valuation, discounted cash flow, relative valuation, value creation

JEL Classification Codes : G11, G32, G41

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Valuation means determining the worth of a firm or a company. It is a quantitative approach through which the present value of a company is determined by discounting its future cash flows using its cost of capital (Fernández, 2007). All the stakeholders of a company can use a valuation. Generally, investors prefer valuation for making informed portfolio decisions. The suppliers and customers use valuation to identify the future of the company. The company can also use it when making strategic decisions (Gilbertson & Preston, 2005).

The valuation process starts by gathering information about the economy, industry, and company. The financial metrics from the recent annual reports, earnings call transcripts, investor presentations, equity research reports, etc., play a crucial role in setting assumptions related to revenue and cost. The choice of the right valuation method is also essential for estimating the true value of a company (Chugh & Meador, 1984). The valuation provides not only objective evaluation but also valuable feedback to a company (Capinski & Patena, 2009).

A valuation can be done in three different approaches: cost, income, and market. The cost approach is not commonly used by any firm, where it measures the costs the firm incurs to re-build the business, and this approach ignores value creation or the generation of cash flows (Damodaran, 2016). In the case of the income approach, a business is valued by arriving at its future earnings. The earnings are calculated by projecting the income and

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adjusting for changes in growth rates and taxes (Plenborg, 2002). The discounted cash flow (DCF) is one of the income approach methods, wherein the results are enterprise and equity values. Enterprise value is the overall value of the business which belongs to both the shareholders and debt holders; however, equity value is the value of the business belonging to equity shareholders only (Damodaran, 2016). Under the market approach, there are two methods, namely comparable company and precedent transactions. The comparable company method compares the present value of the business to that of its similar businesses. The precedent transaction also compares the business to a similar business recently sold or acquired in the industry (Turcas et al., 2016).

The fast-moving consumer goods (FMCG) sector is the fourth largest sector in the Indian economy, with many sub-sectors contributing to about 20% of the GDP. This sector employs around 3 million people, which approximates 5% of the total employment in the country. The three main segments under FMCG are household and personal care, which accounts for 50% ; food and beverages account for around 19%, and healthcare accounts for the remaining 31% of the FMCG sales in India. The key drivers for the growth of this sector are an increase in awareness among the people, ease of access, and change in the lifestyle of people. The urban segment contributes around 55% of the revenue of the overall FMCG sector (Dodiya, 2018). However, in recent years, FMCG has seen rapid growth in rural India compared to urban. Semi-urban and rural segments are witnessing a rapid pace of growth, and FMCG accounts for around 50% of the total rural spending. Some of the most sold FMCG products are toiletries, cosmetics, household products, and plastic goods. The revenue of the FMCG sector has grown at the rate of 21.4% in the last 10 years, however, due to the recent outbreak of the COVID-19 pandemic, the sector has witnessed huge disruption in both supply chain and consumer behavior. However, the FMCG sector was expected to be back on track swiftly (Shetty et al., 2020).

The major segment in the FMCG sector is household and personal care products. It comprises products like hair care, bath products, skincare, cosmetics, and oral care products. The rise in the percentage of expenditures spent by the middle-class people on their personal care is the major factor contributing to the growth of this segment. Haircare is the main category in this segment, and the Shampoo segment accounts for around \$818 million and is dominated by Hindustan Unilever Limited (HUL) (Kalsie & Arora, 2017). The major players in this segment are HUL, Dabur India, and Godrej Consumer Products Limited, and their market share by revenue are 12%, 2%, and 2%, respectively. Thus, understanding the fair value of these top players would help the investors immensely.

Literature Review

The business valuation provides the facts and figures to arrive at the actual value or worth of the business. The valuation should be performed annually to unveil the company's growth. The benefits of getting a valuation done were better knowledge of company assets, understanding of the resale value of the company, and knowing its worth during mergers and acquisitions (M&A) (Capinski & Patena, 2009). The value of a firm depends on forecasted growth trends. The growth rate was derived from various elements such as product mix, consumer spending, current price levels, etc. (Kalsie & Arora, 2017).

The DCF method provides accurate estimates of intrinsic value; whereas, comparable company valuation is useful when combined with DCF valuation (Kaplan & Ruback, 1995). The DCF method of valuation was used to approximate the fruitfulness of an investment opportunity for the future (Irfan & Akhtar, 2016). A large chunk of value in DCF valuation came from terminal value. Thus, the terminal value will be inappropriate if the future distress is not predicted well in advance. The discount rate was the channel to be adjusted for risk in DCF valuation. Generally, riskier firms have a higher cost of capital than safer firms (Damodaran, 2006). The use of single discount rate and multiple discount rates were examined. Multiple discount rates gave more appropriate values than single discount rates (Lilford et al., 2018). DCF approach and residual income (RI) approach were

theoretically equivalent. As the framework for forecasting is often based on accounting numbers rather than cash flows, the RI approach seemed to be the best alternative to the DCF approach (Plenborg, 2002).

DCF was a standard method for measuring the valuation of a gas and pipeline company. The terminal value was determined by using the Gordon growth model. The key assumption taken was that the volume transported through the pipeline system, known as the “throughput,” was an important factor in determining the cash flows (Henson, 2017). The challenge that internet services companies faced in a firm's valuation was uncertainties in the future cash flows. A probability-based Monte Carlo (MC) valuation model was used to include uncertainties. The revenues and costs were forecasted based on the growth rate. The results proved that the use of the MC in the DCF method successfully took uncertainties into account (Ali et al., 2010). There were two main issues involved in valuing financial firms like banks and insurance companies, such as estimating the cash flow and considering the regulatory framework. On the one hand, the regulatory restriction made excess returns and increased value, and on the other hand, it restricted returns by preventing a firm from entering a business. The simple model developed by the author using the cost of equity and return on equity as drivers sorted out these issues (Damodaran, 2013).

The discussion on the valuation of private firms was taken in which there were estimation problems that were unique to private firms. The history and depth of information available in these firms were less compared to publicly traded firms. Here, the standard techniques for estimating risk parameters were lacking. The beta of a similar publicly traded firm was considered and was converted into unlevered beta, then relevered according to the debt and equity of the private firms (Damodaran, 1999). The calculations of cash flows in the middle and at the end of a year were compared, and their biases in cash flows were seen. For this purpose, the author developed four basic scenarios: rapidly growing technology companies, companies in a steady market, mature companies with a losing market, and seasonal companies in sales and earnings. Three discount rates (15%, 20%, and 25%) were considered for testing the sensitivity of the results. This shows there were biases; the end-of-year method underestimated a value, and the mid-year method overestimated a value (Lawrence, 2009).

The start-up companies do not have a history, and their survival chances are significantly less. Most importantly, the budding firm will have to face valuation issues. A combination of forward multiples and high discount rates helped the young companies in valuation (Damodaran, 2009). Business model innovation greatly influenced the company's value proposition (Bashir & Verma, 2017). The capital market regulator should review the accuracy of the price band fixed at the initial public offer (IPO) to ensure that the offer price reflects the company's true value (Singh & Nayyar, 2017). When a firm merged with another firm or acquired another firm, there was a necessity to value both firms. The acquiring company generally paid more during the M&A compared to the synergistic gains it is going to realize (Gala & Bhattacharya, 2022). A poor valuation resulted in an inflated price, which made the M&A a failed project (Hossain, 2021).

The literature mainly portrays DCF as one of the significant methods to value any company or business, and the relative valuation is effective when it is combined with DCF. No prior study examined the true value of the top three personal care FMCG companies in India using DCF and relative valuation to assist the market participants. This study attempts to build the gap and model a pandemic scenario's impact on valuation.

Methodology

This empirical study intends to find the true value of select FMCG companies using DCF and comparable company valuation methods.

Sampling Framework

The companies chosen for this study were from the FMCG – Personal care segment. In this segment, the top three

publicly traded companies based on market capitalization were chosen: HUL, Dabur India Limited, and Godrej Consumer Products Limited.

Source of Data

The data used for this study were secondary. The stock price data were collected from the National Stock Exchange (NSE) website. The data required for setting up assumptions were gathered from the recent annual reports, earnings call transcripts, investor presentations, and equity research reports.

Period of the Study

The financial metrics were collected from the annual reports of the companies from 2015 – 2019, and the explicit forecast was done for a period of five years, from 2020 – 2024.

Tools and Techniques

DCF modeling was done using the cost of capital, free cash flow, and terminal value; EV/sales and EV/EBITDA, P/E multiples were used in relative valuation.

(1) Weighted Average Cost of Capital (WACC). The cost of capital is the discount rate which is very crucial in DCF valuation. It is the combination of both the cost of equity and debt. The cost of equity is computed using the capital asset pricing model (CAPM) by employing a 5-year monthly stock price and NIFTY FMCG as a benchmark index. The 10-year government bond yield was used as a risk-free rate (R_f). The cost of debt was calculated as a ratio of finance cost to the company's total debt. Then, the five-year (2015 – 2019) average was used as the cost of debt. The weights of debt and equity were estimated using the book value of debt and the market value of equity. To arrive at the after-tax cost of debt, the interest tax shield was considered. The following formula was used to calculate the discount rate.

$$WACC = (W_e \times K_e) + [W_d \times K_d(1 - t)]$$

Where,

$WACC$ = Weighted average cost of capital,

W_e = weight of equity,

K_e = cost of equity,

W_d = weight of debt,

K_d = cost of debt,

t = tax rate.

(2) Free Cash Flow to Firm (FCFF). It is a measure of cash flow from operation available for distribution after depreciation and amortization, taxes, working capital, and capital expenditure. The explicit FCFF forecast was done based on financial modeling using historical numbers.

(3) Terminal Value. It was calculated using the perpetual growth method. The enterprise value was arrived at by adding the present value of FCFF during the explicit forecast period and terminal period. Equity value was

measured by subtracting net debt from enterprise value. The below formula was used to calculate the terminal value :

$$\text{Terminal Value} = \frac{(FCFF \times (1 + g))}{(WACC - g)}$$

where,

g = Sustainable growth rate.

(4) Multiples Used. Under the comparable company valuation method, EV/Sales and EV/EBITDA, P/E multiples were used. The enterprise value of the select companies was calculated using EV/Sales and EV/EBITDA, then the equity value was identified from enterprise value. Given the P/E multiple, equity value arrived directly. From the equity value, enterprise value was calculated by adding net debt.

Analysis and Results

Financial market participants use valuation to understand the true value of a stock. The appropriateness of valuation is subject to the method of valuation, determination of discount rate, growth rate, and other assumptions.

Table 1 portrays the discount rate calculation of all three companies. The marginal tax rate is used to determine the after-tax debt cost. It is evident from the table that Godrej's cost of capital is slightly higher than HUL ; whereas, Dabur has the least cost of capital. The lower cost of capital results in a higher present value.

It can be inferred from Table 2 that FCFF has been arrived at by adjusting depreciation and amortization, Capex, and change in net working capital from net operating profit after tax (NOPAT). The terminal value has been

Table 1. WACC Calculation

Particulars	HUL	Dabur	Godrej
Cost of equity	11.42%	11.0%	11.8%
Cost of debt	–	7.0%	5.3%
Tax rate	35%	35%	35%
Weightage of debt	–	1%	4%
Weightage of equity	100%	99%	96%
WACC	11.42%	10.95%	11.47%

Table 2. DCF Valuation – Hindustan Unilever Limited (₹ in million)

Particulars	2020E	2021E	2022E	2023E	2024E
EBIT	1,51,072	1,81,731	2,27,735	2,85,247	3,71,531
Less: Tax	39,128	47,068	58,983	73,879	96,227
NOPAT	1,11,944	1,34,663	1,68,752	2,11,368	2,75,304
Cash-flow Adjustments :					
Add: Depreciation and Amortization	2,389	2,422	2,457	2,493	2,530

Less: Capital Expenditure	3,025	3,085	3,146	3,208	3,272
Less: Change in Net Working Capital	(18,701)	(6,499)	(6,020)	(7,525)	(11,287)
Free Cash Flow to Firm	1,30,009	1,40,499	1,74,083	2,18,178	2,85,849
Terminal Value					55,80,129
Enterprise Value					39,11,683
Less: Net debt					(36,580)
Equity Value					39,48,263
Intrinsic value per share					₹ 1,824
Market Price as on 31-03-2019					₹ 1,707
Upside					6.9%

Table 3. Sensitivity of Intrinsic Value per Share - HUL

Growth rate	WACC			
	10.5%	11.0%	11.5%	12.0%
3.0%	1,433	1,336	1,251	1,176
3.5%	1,517	1,409	1,314	1,231
4.0%	1,614	1,492	1,385	1,293
4.5%	1,728	1,587	1,467	1,362
5.0%	1,862	1,699	1,561	1,442
5.5%	2,023	1,830	1,670	1,535
6.0%	2,220	1,989	1,800	1,642

calculated by the perpetual growth method. Enterprise value has been measured by adding the present value of explicit FCFF and terminal value. Intrinsic value per share is calculated by dividing equity value by the number of outstanding shares. It is evident from the table that the intrinsic value per share is greater than the market price. Thus, there is a likelihood of a 6.9% upside.

Table 3 reveals that there exists an inverse relationship between WACC and intrinsic value per share and the linear relationship between growth rate and intrinsic value per share. The intrinsic value per share is ₹ 1,824 at an 11.42% discount rate and 6% growth rate. If the discount rate is reduced to 10.50%, keeping all other variables unchanged, the intrinsic value is increased to ₹ 2,220. It shows that there is a 22% increase in intrinsic value per share owing to a 0.92% decrease in the discount rate.

It is clear from Table 4 that the intrinsic value per share of Dabur India is greater than its market price; thus, the stock is underpriced.

Table 4. DCF Valuation – Dabur India (₹ in million)

Particulars	2020E	2021E	2022E	2023E	2024E
EBIT	32,530	39,304	49,477	62,199	81,294
Less: Tax	8,188	9,893	12,453	15,656	20,462
NOPAT	24,342	29,411	37,024	46,543	60,832

Cash-flow Adjustments :

Add: Depreciation and Amortization	1,463	1,487	1,512	1,537	1,562
Less: Capital Expenditure	1,772	1,803	1,834	1,865	1,897
Less: Change in Working Capital	(543)	2,344	3,516	4,395	6,592
Free Cash Flow to Firm	24,576	26,751	33,186	41,820	53,905
Terminal Value					11,59,020
Enterprise Value					8,17,909
Less : Net Debt					1,961
Equity Value					8,15,948
Intrinsic Value per share					₹ 462
Market Price as on 31-03-2019					₹ 409
Upside					12.9%

Table 5. Sensitivity of Intrinsic Value per Share – Dabur India

Growth rate	WACC			
	10.0%	10.5%	11.0%	11.5%
3.0%	352	327	304	285
3.5%	375	346	321	299
4.0%	402	369	340	316
4.5%	433	395	362	335
5.0%	471	426	388	356
5.5%	518	463	419	382
6.0%	575	509	455	411

The sensitivity analysis is performed by assuming a slight change in WACC and growth rates. The computed discount rate and intrinsic value per share for Dabur are 10.95% and ₹ 462, respectively. It is apparent from Table 5 that when the discount rate is reduced to 10%, keeping the growth rate unchanged, the intrinsic value is increased to ₹ 575. It shows that there is a 24.46% increase in intrinsic value per share due to a 0.95% decrease in the discount rate.

Table 6 depicts that the intrinsic value per share is greater than the market price; thus, Godrej Consumer Products Ltd. shares are also underpriced.

Table 6. DCF Valuation – Godrej Consumer Products Limited (₹ in million)

Particulars	2020E	2021E	2022E	2023E	2024E
EBIT	30,012	36,335	45,810	57,649	75,398
Less: Tax	7,554	9,146	11,530	14,510	18,978
NOPAT	22,458	27,189	34,280	43,139	56,420
Cash-flow Adjustments :					
Add: Depreciation and Amortization	1,518	1,501	1,485	1,470	1,456

Less: Capital Expenditure	476	528	577	625	671
Less: Change in Working Capital	(5,180)	(589)	(883)	(1,104)	(1,656)
Free Cash Flow to Firm	28,680	28,751	36,071	45,088	58,861
Terminal Value					11,40,633
Enterprise Value					8,01,073
Less : Net Debt					19,810
Equity Value					7,81,263
Intrinsic Value per share					₹ 764
Market Price as on 31-03-2019					₹ 686
Upside					11.4%

Table 7. Sensitivity of Intrinsic Value per Share – Godrej Consumer Products Ltd.

WACC Growth rate				
	10.5%	11.0%	11.5%	12.0%
3.0%	600	558	521	488
3.5%	637	589	548	512
4.0%	679	625	579	539
4.5%	729	667	615	569
5.0%	787	716	656	604
5.5%	857	773	703	644
6.0%	943	842	760	691

From Table 7, it is evident that an increase in WACC results in a decrease in intrinsic value per share. An increase in growth rate increases the intrinsic value per share. The intrinsic value is ₹ 764 at 11.47% and 6% discount rate and growth rate, respectively. If the discount rate is reduced to 10.50%, keeping all other variables unchanged, the intrinsic value is increased to ₹ 943. It shows that there is a 23% increase in intrinsic value per share because of a 0.97% decrease in the discount rate.

Table 8 exhibits the intrinsic value per share based on comparable company multiples. The enterprise value of

Table 8. Comparable Company Valuation (₹ in million)

Company Multiple	HUL	Dabur	Godrej
Earnings	66,670	15,465	17,198
EBITDA	1,04,930	20,976	22,553
Sales	4,04,150	90,089	1,00,231
Net Debt	(36,580)	1,961	19,810

	EV/Sales (7.36)	EV/EBITDA (32.00)	P/E (44.96)	EV/Sales (7.36)	EV/EBITDA (32.00)	P/E (44.96)	EV/Sales (7.36)	EV/EBITDA (32.00)	P/E (44.96)
Enterprise Value	29,76,196	33,57,719	29,60,602	6,63,422	6,71,233	6,97,197	7,38,110	7,21,697	7,92,945
Equity Value	30,12,776	33,94,299	29,97,182	6,61,461	6,69,272	6,95,236	7,18,300	7,01,887	7,73,135
Intrinsic Value per Share	₹ 1,392	₹ 1,568	₹ 1,384	₹ 374	₹ 379	₹ 394	₹ 703	₹ 687	₹ 756

select companies is determined based on the median of comparable company multiples. The equity value is arrived at by subtracting net debt from enterprise value.

The football chart summarizes the results of the valuation. It depicts the intrinsic value per share from low to high based on different valuation methods. It is evident from Figure 1 that DCF shows a higher range than the comparable method.

Figure 2 portrays the valuation summary of Dabur India. The market price is marked with a dotted line on the chart. It is evident from Figure 2 that the valuation result of DCF has a wider range than that of others.

Figure 3 shows the valuation summary of Godrej Consumer Products Ltd. It is observed from this figure that comparable company valuation and 52-week high/low are neck to neck.

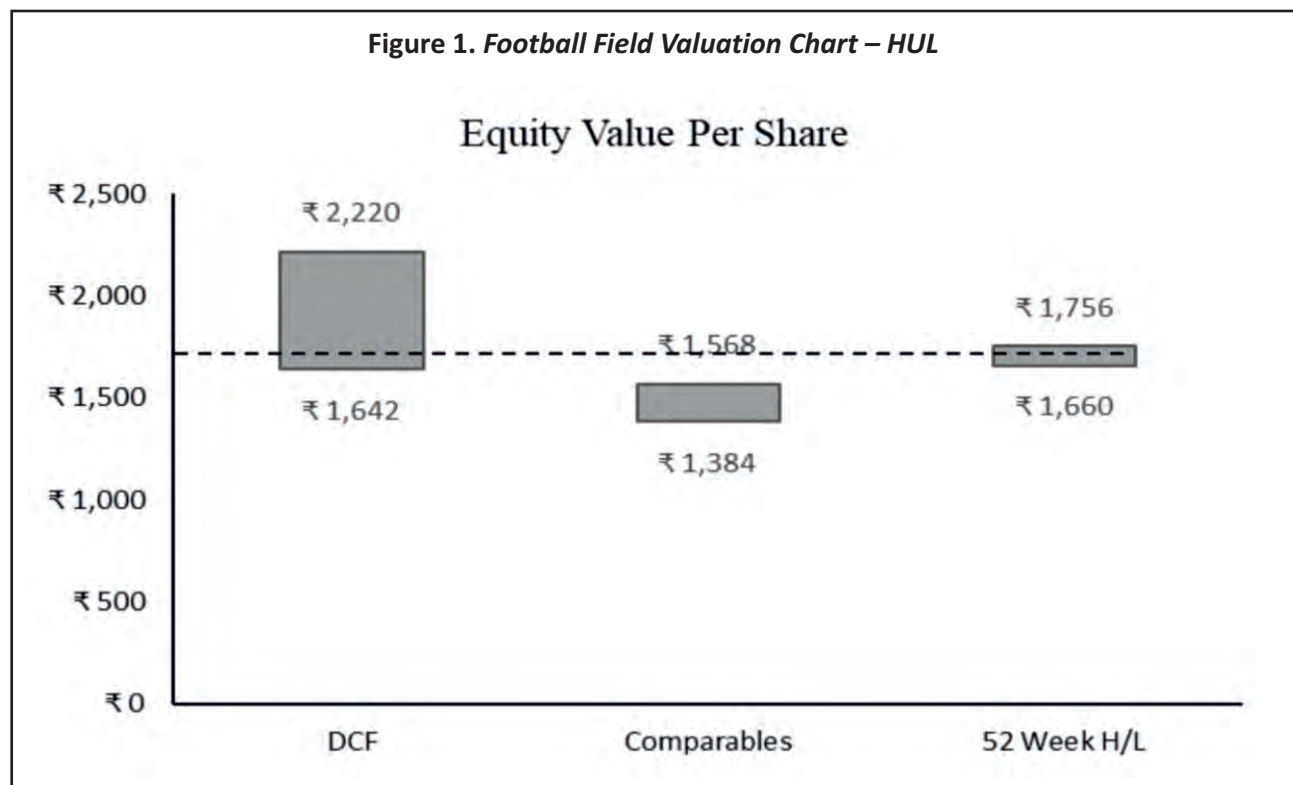


Figure 2. Football Field Valuation Chart – Dabur India

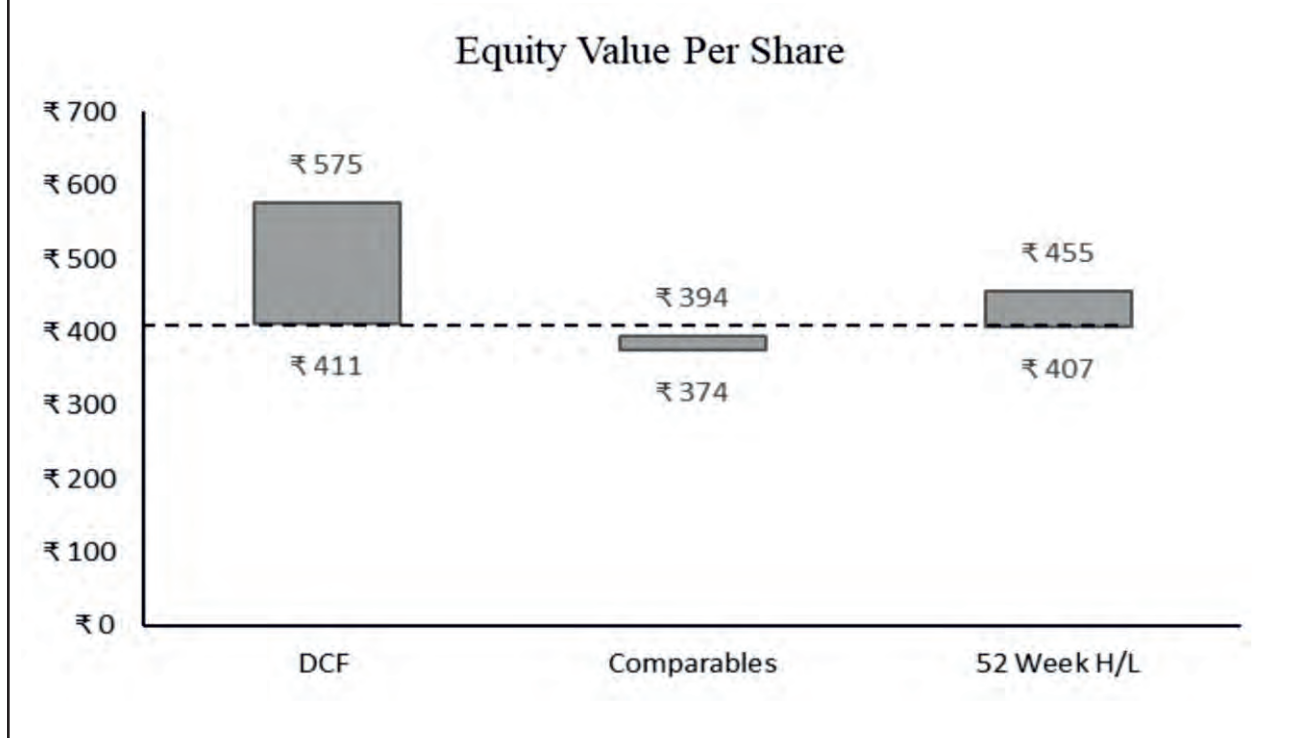
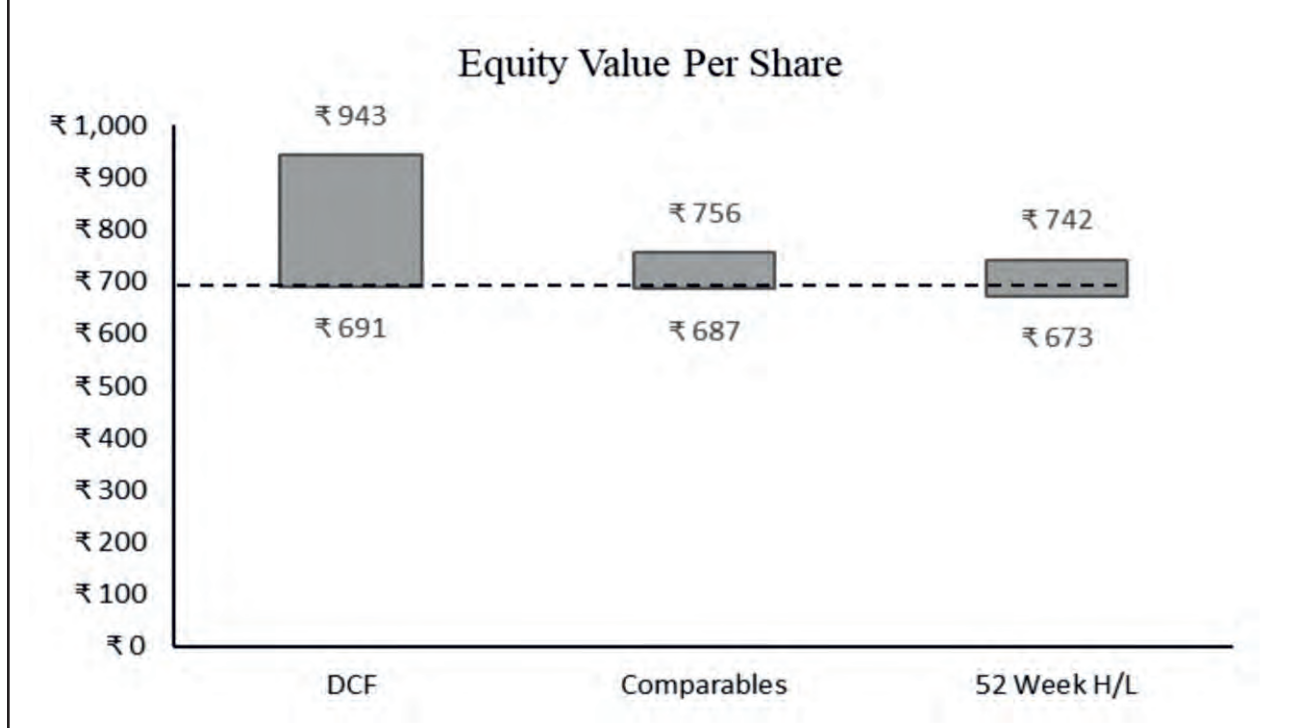


Figure 3. Football Field Valuation Chart – Godrej



Recommendations and Conclusion

The DCF model is one of the most reliable methods of valuation. DCF valuation is more of an art in the face of inherently uncertain business forecasts (Brotherson et al., 2014). Compulsory DCF disclosures can be incrementally helpful for security valuation (Patatoukas et al., 2015). The estimated intrinsic value is then compared with a market price to identify whether the stock is overpriced or underpriced. The three methods, that is, DCF, market-value added, and multiplier method, offer deviated results (Rahgozar, 2006). However, this study disproves the findings of an earlier study, that is, there is not much variation in the results due to the valuation method. As both the methods suggest that all three stocks are underpriced, these could be the right pick for investors to create wealth. This study concludes that all three companies are adding value continuously, therefore, these are wealth-creating stocks.

Managerial Implications

Valuation is a tool used by equity research analysts to determine a company's fair value. Investors should be aware of the intrinsic value of a company before investing. Extrinsic value is the price the stock market is presently valuing a company. Intrinsic value is an anchor for long-term investors to hold on to, even while the market is choppy. If the market undervalues a company, that is, the intrinsic value is greater than its extrinsic value, it is an opportunity for the investors to pitch in. If there is no substantial change in the structural story, the intrinsic value should remain robust even in a downward market and offer comfort to the investor to hold and even build up the position as long as the analysis is appropriate. This study employs DCF and comparable company methods to discover the intrinsic value of the top three FMCG companies. It reveals that the select companies' intrinsic value is higher than its extrinsic value. Thus, investors can add these stocks to their portfolios to create long-term wealth.

Limitations of the Study and Scope for Further Research

This study is confined to DCF and relative valuation methods only. As there are multiple valuation methods, future researchers could add other methods to understand the variation. Moreover, if sentiments drive the market, then realizing the true value may take time.

Authors' Contribution

Dr. Nalini and Ms. Aishwarya were interested in exploring the real value of India's top three FMCG companies. They identified DCF and relative valuation as the most authentic valuation methods from the earlier literature. Thus, they employed the same to unveil the true value of select companies. Ms. Aishwarya extracted financial details from the annual reports and computed the intrinsic value under the supervision of Dr. Nalini.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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